Course Catalog

Feb 2026

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Drone Operations & Control

This course trains operators to safely and effectively conduct unmanned aircraft operations in Arctic and cold-weather environments. Emphasis is placed on battery and thermal management, degraded navigation awareness, wind and visibility constraints, payload integration, and disciplined mission execution.

Participants develop structured preflight planning, contingency development, cold-soak recovery procedures, and documentation standards aligned with commercial and defense-adjacent operations. Risk thresholds and mission abort criteria are embedded throughout training to reinforce professional operational judgment.

Training combines classroom preparation with controlled field scenarios culminating in a mission-based evaluation and structured after-action review.

Levels offered:

Beginner – Core aircraft handling, cold-weather battery protocols, and controlled mission execution under instructor supervision – 3 days

Intermediate – Degraded navigation management, payload integration, and time-constrained scenario execution with documented risk gates – 5 days

Advanced – Multi-crew command structure, decision authority under stress, and full mission evaluation with formal reporting package – 5 days

Snow Machine Operations

This course trains military, Rangers, public safety, government, NGO, and industry personnel to plan and conduct safe, effective movement over complex winter terrain in Arctic and Sub-Arctic environments using snowmobiles as the primary mobility platform.

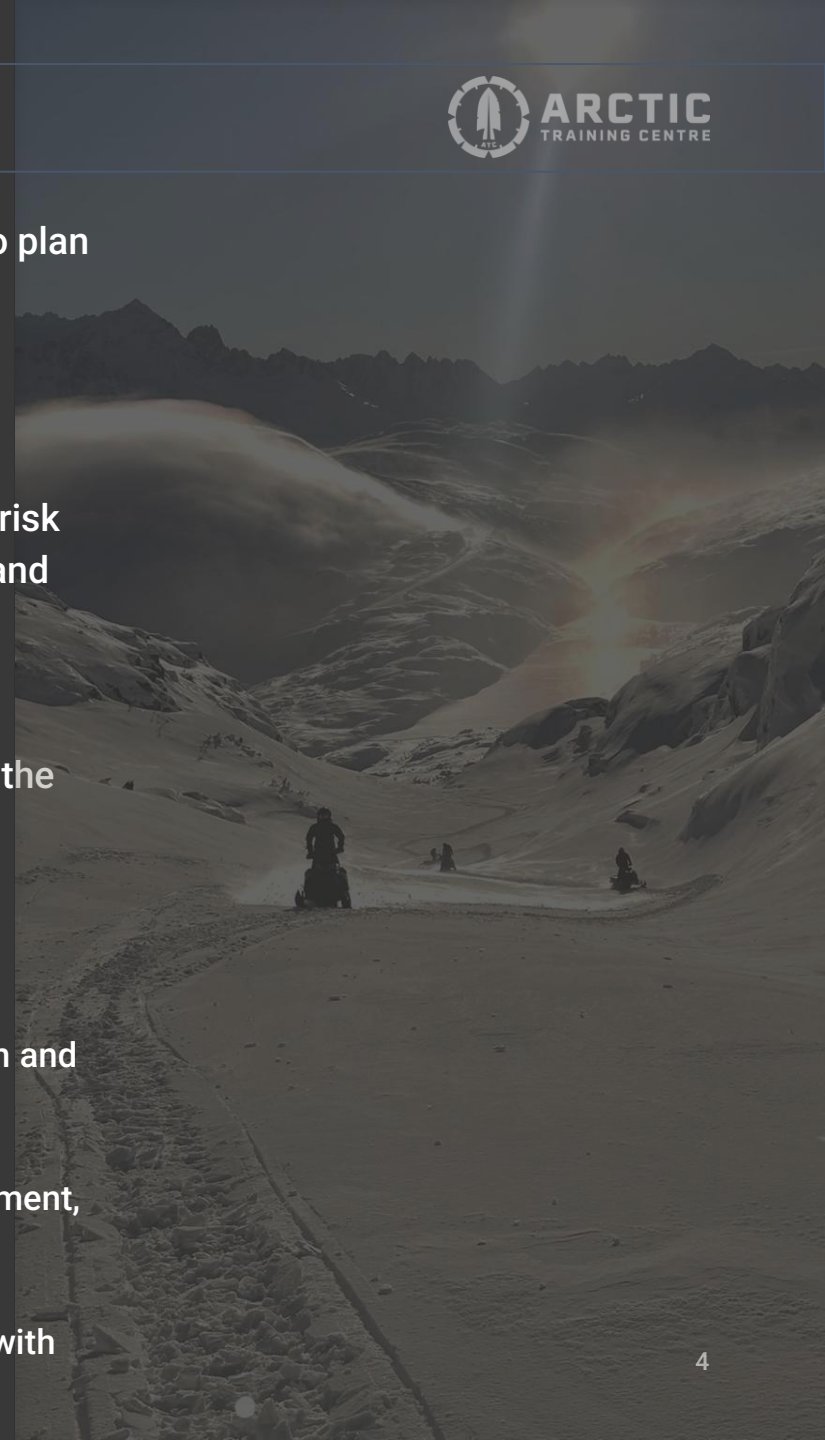
Participants learn to assess snow, ice and terrain; operate machines across hills, frozen water bodies, tundra, forest and broken ground; plan multi-leg movements with sound fuel, load and risk management, integrated with cold-weather survival, PPE, equipment maintenance and repair, and emergency recovery.

Training combines hands-on classroom instruction with controlled drills and progressive field exercises, culminating in a scenario linking mobility to patrol, SAR or logistics tasks based on the unique participants.

Graduates receive an ATC “Snowmobile Operations” certificate.

Levels offered:

- Beginner: Core snowmobile care and handling, basic winter risk awareness, simple route selection and short-range movement in controlled terrain.- 3 day course
- Intermediate: Complex terrain navigation, multi-leg movement planning, towing and load management, and scenario based field exercises.- 5 day course
- Advanced: High-tempo operations in demanding terrain, advanced riding techniques, integration with broader partrol/SAR/Logistics plans and enhanced modules for specialized teams.- 5 day course



ATV/UTV Operations

This course trains military, Rangers, public safety, government, NGO, and industry personnel to plan and conduct safe, effective movement over complex terrain in Arctic and Sub-Srctic environments using ATVs/UTVs as the primary mobility platform.

Participants learn to assess variable terrain; operate machines across hills, muskeg, crossing water bodies, tundra, forest and broken ground; plan multi-leg movements with sound fuel, load and risk management, integrated with remote-area survival, PPE, equipment maintenance and repair, and emergency recovery.

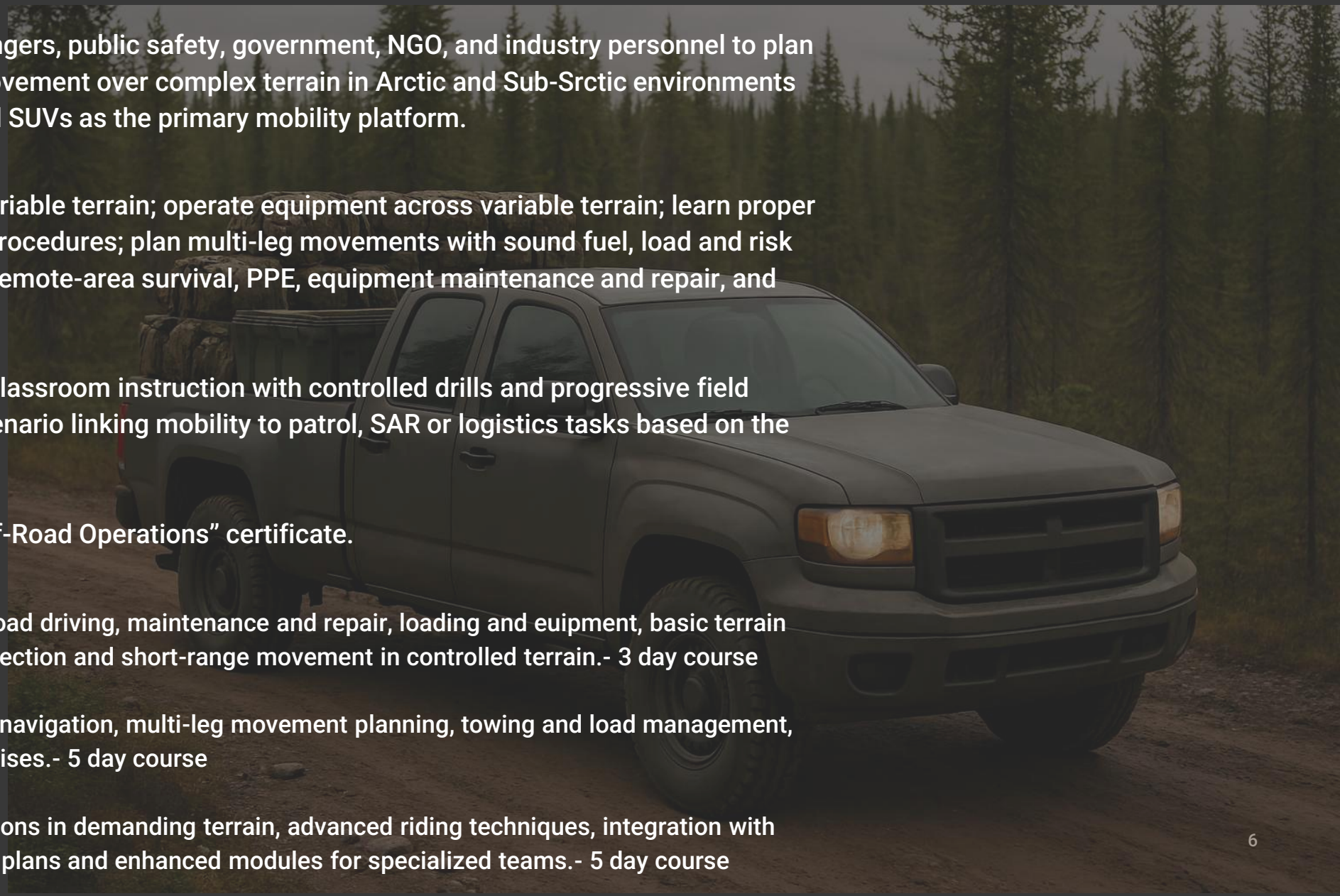
Training combines hands-on classroom instruction with controlled drills and progressive field exercises, culminating in a scenario linking mobility to patrol, SAR or logistics tasks based on the unique participants.

Graduates receive an ATC “ATV/UTV Operations” certificate.

Levels offered:

- Beginner: Introduction to ATV/UTV riding techniques, maintenance and repair, basic terrain assessments, simple route selection & short-range movement in controlled terrain.- 3 day course
- Intermediate: Complex terrain navigation, multi-leg movement planning, towing and load management, and scenario based field exercises.- 5 day course
- Advanced: High-tempo operations in demanding terrain, advanced riding techniques, integration with broader partrol/SAR/Logistics plans and enhanced modules for specialized teams.- 5 day course

Off-Road Operations



This course trains military, Rangers, public safety, government, NGO, and industry personnel to plan and conduct safe, effective movement over complex terrain in Arctic and Sub-Srctic environments using 4X4 equipped trucks and SUVs as the primary mobility platform.

Participants learn to assess variable terrain; operate equipment across variable terrain; learn proper loading, tie-down and towing procedures; plan multi-leg movements with sound fuel, load and risk management, integrated with remote-area survival, PPE, equipment maintenance and repair, and emergency recovery.

Training combines hands-on classroom instruction with controlled drills and progressive field exercises, culminating in a scenario linking mobility to patrol, SAR or logistics tasks based on the unique participants.

Graduates receive an ATC “Off-Road Operations” certificate.

Levels offered:

- Beginner: Introduction to off-road driving, maintenance and repair, loading and euipment, basic terrain assessments, simple route selection and short-range movement in controlled terrain.- 3 day course
- Intermediate: Complex terrain navigation, multi-leg movement planning, towing and load management, and scenario based field exercises.- 5 day course
- Advanced: High-tempo operations in demanding terrain, advanced riding techniques, integration with broader partrol/SAR/Logistics plans and enhanced modules for specialized teams.- 5 day course

Boat Safety Operations (under 8m)

This course trains military, Rangers, public safety, government, NGO, and industry personnel to plan and conduct safe, effective water-bourne operations on flat and quick moving water bodies in Arctic and Sub-Srctic environments using various small craft as the primary mobility platform.

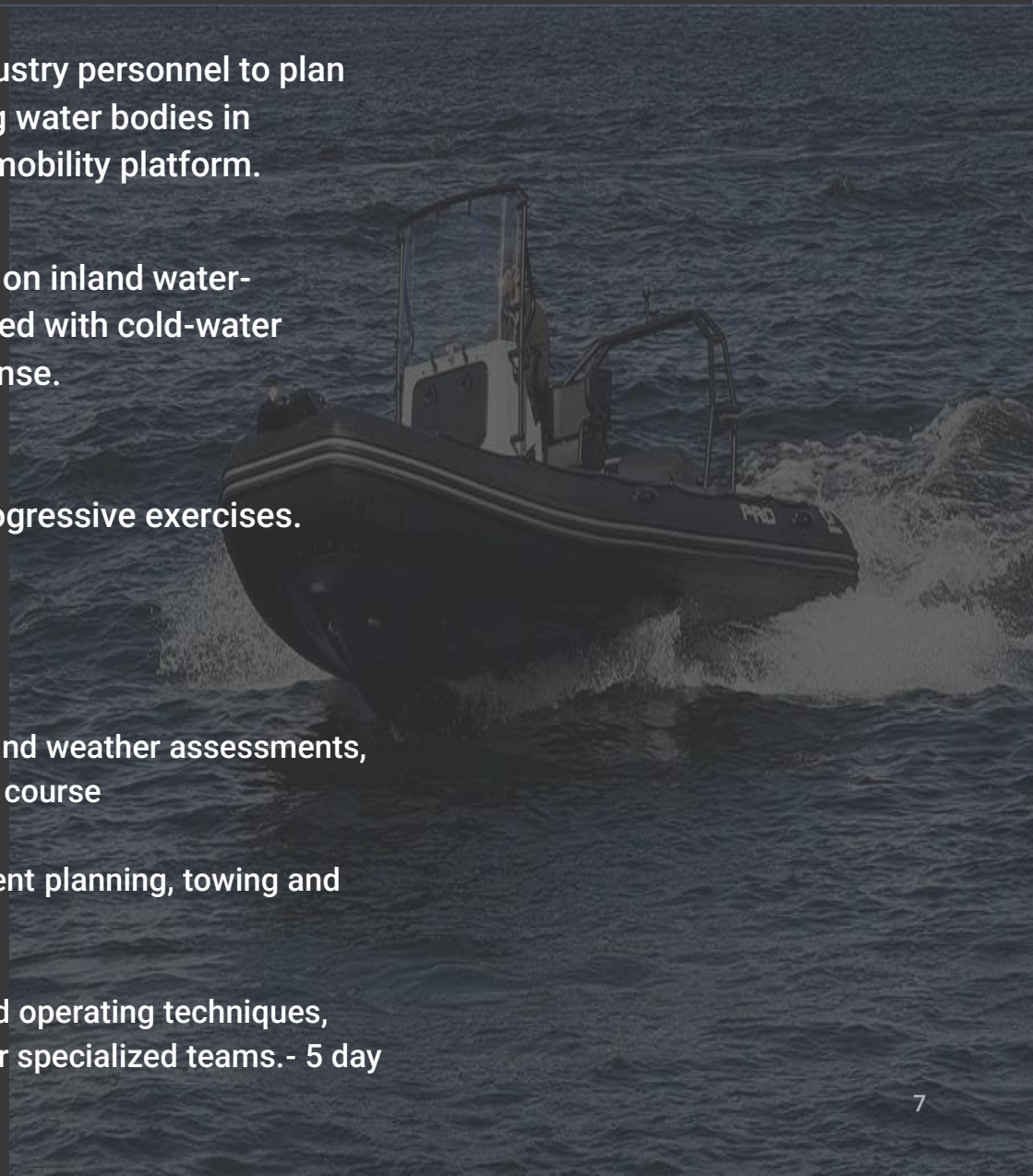
Participants learn to assess inland waterbody conditions; operate small craft on inland water-bodies; plan movements with sound fuel, load and risk management, integrated with cold-water survival, PPE, boat inspection, maintenance and repair, and emergency response.

Training combines hands-on practical instruction with on-water drills and progressive exercises.

Graduates receive an ATC “Boat Safety Operations” certificate.

Levels offered:

- Beginner: Introduction to boat operation, maintenance and repair, basic water and weather assessments, simple route selection and short-distance operating in flat water terrain.- 3 day course
- Intermediate: Increased complexity water-bourne navigation, multi-leg movement planning, towing and load management, and scenario based field exercises.- 5 day course
- Advanced: High-tempo operations in demanding terrain, advanced planning and operating techniques, integration with broader partrol/SAR/Logistics plans and enhanced modules for specialized teams.- 5 day course



Complex Terrain Sea Ice

This course prepares teams to safely operate and traverse dynamic sea ice environments. Instruction focuses on ice formation types, visible risk indicators, overflow awareness, pressure ridge recognition, and structured travel spacing.

Participants develop route selection criteria and emergency response planning specific to unstable ice conditions.

Training culminates in a controlled operational movement requiring environmental reassessment and documented risk justification.

Levels offered:

Beginner – Ice identification fundamentals, personal safety spacing, and entry/exit planning – 3 days

Intermediate – Route selection with decision gates and overflow avoidance – 5 days

Advanced – Team leadership across evolving ice conditions with extraction planning – 5 days

Alternate Mobility Platforms

ATC offers courses specific to alternative mobility platforms including horseback, dog-sled, kite-skis, pack-rafts, motorcycles, ATV or others on request. These courses train military, Rangers, public safety, government, NGO, and industry personnel on various mobility platforms on request.

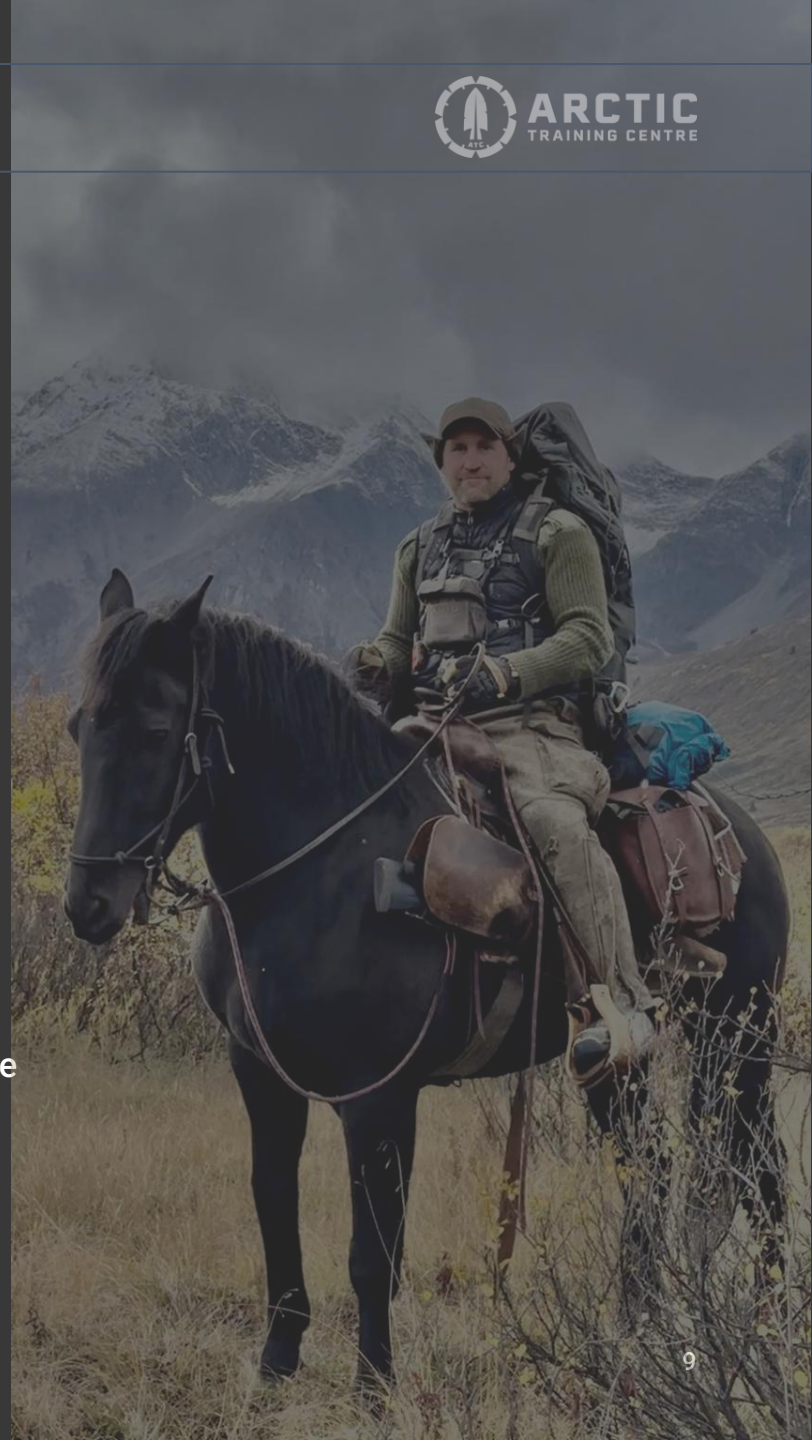
Participants learn platform operation, appropriate terrain assessment and utilization, risk-assessment, maintenance and repair, planning and recovery.

Training combines hands-on instruction with the specific mobility platform advancing from controlled drills and progressive field exercises to scenario-based training designed to meet operational needs.

Graduates receive an ATC “Mobility Operations” certificate specific to the platform trained on.

Levels offered:

- Beginner: Introduction to operating techniques, maintenance and repair, basic terrain and risk assessments, simple route selection and short-range movement in controlled terrain.- 3 day course
- Intermediate: Complex terrain navigation, multi-leg movement planning, route management, and scenario based field exercises.- 5 day course
- Advanced: High-tempo operations in demanding terrain, advanced riding techniques, integration with broader partrol/SAR/Logistics plans and enhanced modules for specialized teams.- 5 day course



Complex Terrain Patrol

This course develops disciplined movement, navigation, and reporting skills in remote Arctic terrain. Instruction emphasizes patrol planning fundamentals, spacing, communication discipline, and environmental exposure management.

Participants learn to adapt to degraded visibility and shifting operational constraints while maintaining team cohesion.

Field exercises culminate in a multi-stage patrol evolution with structured after-action analysis.

Levels offered:

- Beginner – Patrol planning fundamentals and navigation basics – 3 days
- Intermediate – Degraded communication procedures and evolving objectives – 5 days
- Advanced – Team leadership under environmental stress with full patrol evaluation – 5 days

Alpine Overland Training

This course prepares teams for independent overland movement in remote and mountainous cold environments. Instruction focuses on route planning, camp systems, fuel and heat management, mechanical reliability, and structured contingency planning.

Participants learn resource forecasting, communications discipline, and abort criteria tied to environmental and mechanical variables.

Training culminates in a multi-variable operational scenario with formal after-action documentation.

Levels offered:

- Beginner – Camp systems, route mapping, cold start protocols, and structured travel discipline – 3 days
- Intermediate – Multi-day logistics modeling, reroute decision criteria, and minor field repairs – 5 days
- Advanced – Leadership decision authority, emergency integration, and documented operational reporting – 5 days

Search and Rescue

This course develops foundational and advanced competencies in structured search and rescue operations in Arctic terrain. Instruction includes scene safety, search theory fundamentals, navigation discipline, and patient packaging awareness.

Participants learn search planning segmentation and team coordination under evolving weather conditions.

Field scenarios culminate in a prolonged search requiring planning cycles and coordinated extraction.

Levels offered:

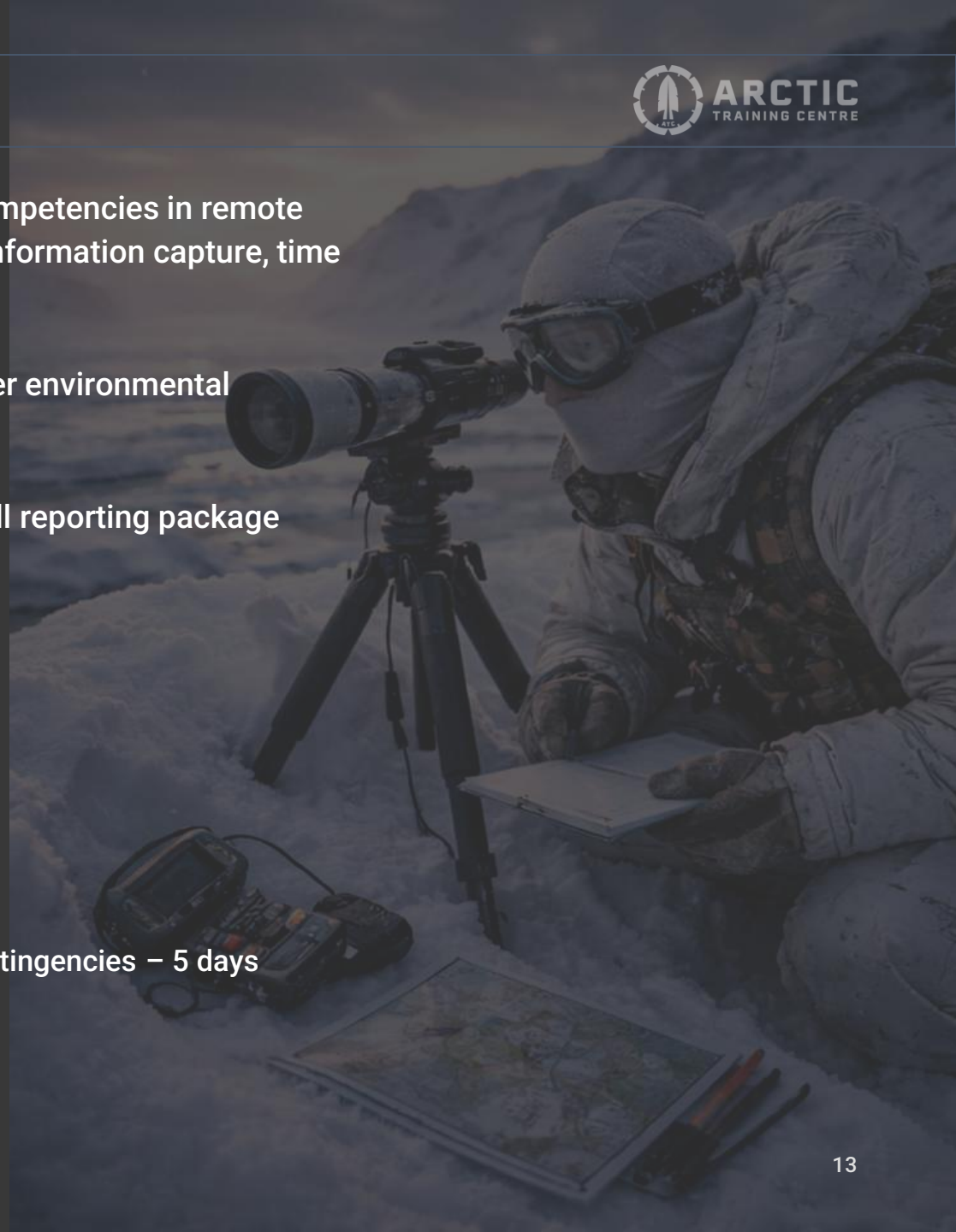
- Beginner – Scene safety and basic search patterns – 3 days
- Intermediate – Search planning segmentation and team coordination – 5 days
- Advanced – SAR leadership and operational period planning – 5 days

Special Reconnaissance

This course develops disciplined observation, reporting, and navigation competencies in remote Arctic environments. Instruction emphasizes objective clarity, structured information capture, time management, and communication protocols.

Participants learn route planning and prioritized information reporting under environmental constraints.

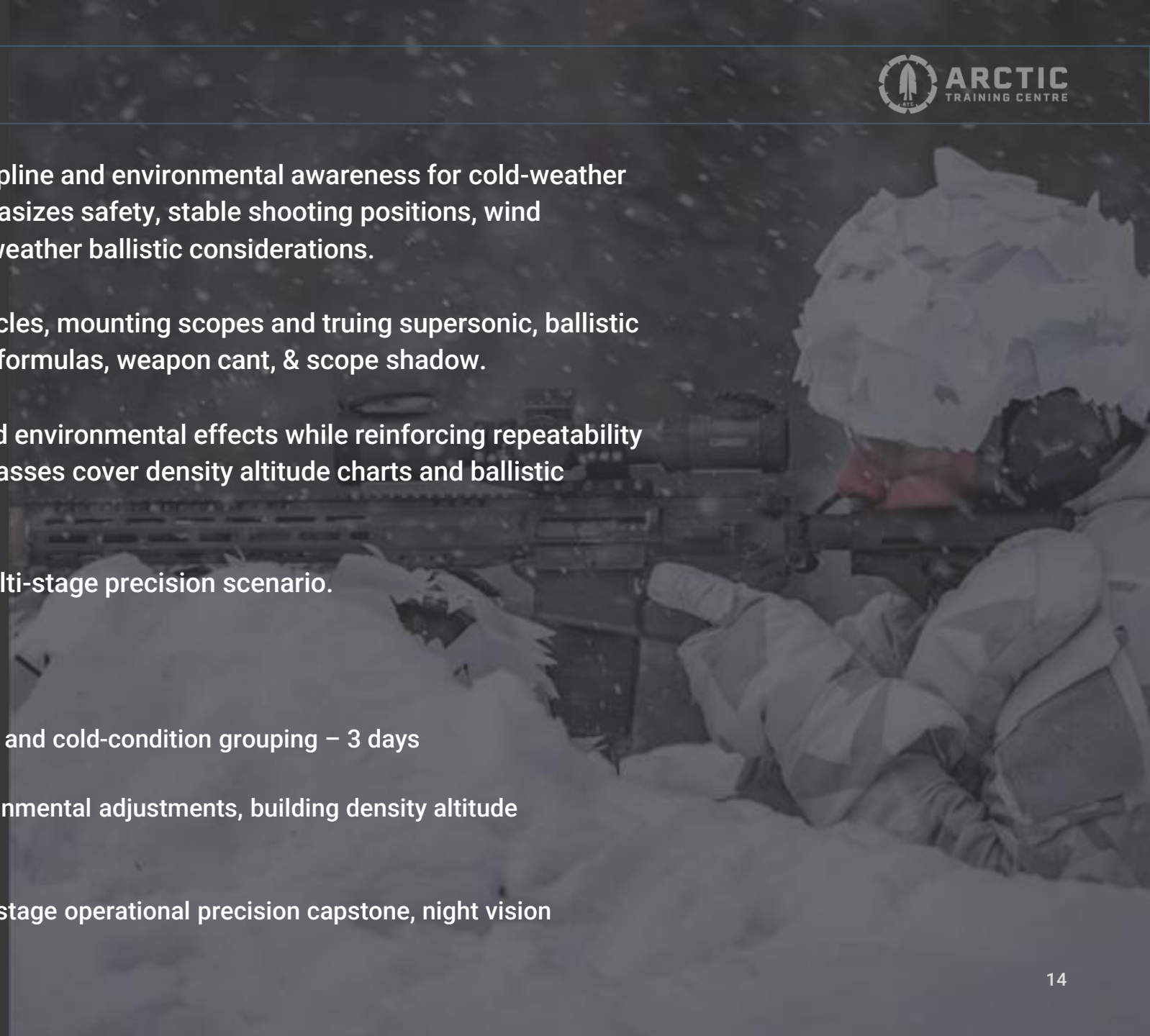
Field scenarios culminate in an extended reconnaissance evolution with full reporting package delivery.



Levels offered:

- Beginner – Observation fundamentals and structured reporting – 3 days
- Intermediate – Multi-leg reconnaissance planning and degraded comms contingencies – 5 days
- Advanced – Team leadership and full mission documentation – 5 days

Long Range Precision Shooting



This course develops precision shooting discipline and environmental awareness for cold-weather marksmanship applications. Instruction emphasizes safety, stable shooting positions, wind interpretation, optics management, and cold-weather ballistic considerations.

Topics covered include selecting calibers, reticles, mounting scopes and truing supersonic, ballistic engine, shooting fundamentals, zeroing, wind formulas, weapon cant, & scope shadow.

Participants manage dexterity degradation and environmental effects while reinforcing repeatability and documentation discipline. Intermediate classes cover density altitude charts and ballistic computers

Structured range evolutions culminate in a multi-stage precision scenario.

Levels offered:

Beginner – Selection, precision fundamentals and cold-condition grouping – 3 days

Intermediate – Wind reading and timed environmental adjustments, building density altitude charts, formulas – 5 days

Advanced – Movement integration and multi-stage operational precision capstone, night vision and thermals – 5 days

Arctic Medical

This course prepares responders to prevent, recognize, and manage medical incidents in remote and cold environments. Instruction focuses on hypothermia, frostbite, prolonged exposure injuries, patient assessment, packaging, and coordinated extraction planning.

Participants develop decision-making skills under delayed evacuation constraints and integrate medical response with environmental and operational realities. Emphasis is placed on stabilization while maintaining team safety and exposure control.

Scenario-driven field exercises culminate in a team-based stabilization and extraction capstone.

Levels offered:

Beginner – Cold injury recognition, insulation and rewarming protocols, and structured patient documentation – 3 days

Intermediate – Multi-patient triage, casualty movement systems, and coordinated medevac communication planning – 5 days

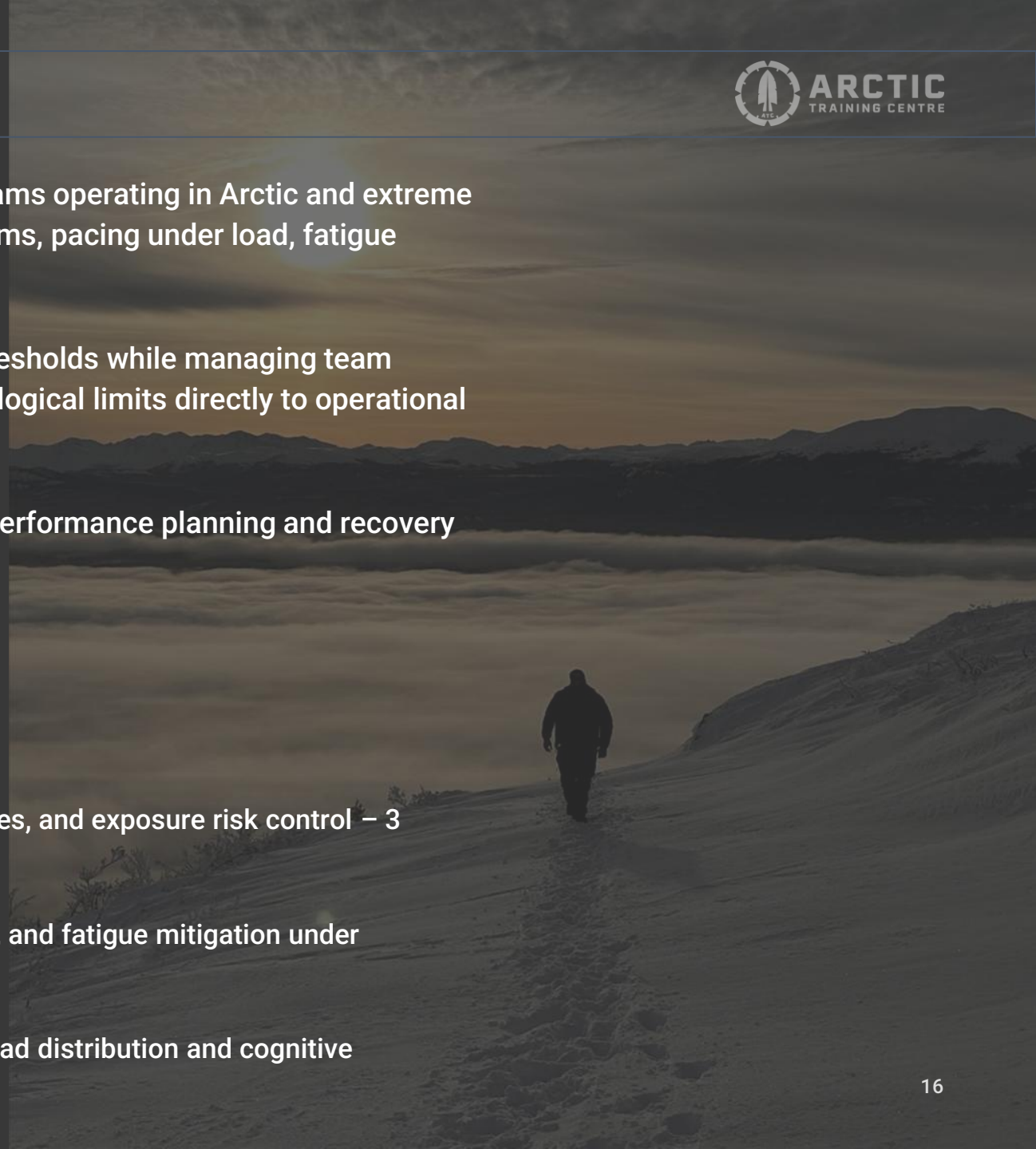
Advanced – Prolonged field care leadership, delayed evacuation scenarios, and team-level medical command decisions – 5 days

Human Performance

This course develops sustainable performance strategies for teams operating in Arctic and extreme cold conditions. Topics include thermoregulation, layering systems, pacing under load, fatigue management, nutrition, hydration, and cognitive resilience.

Participants learn to maintain output without crossing safety thresholds while managing team workload and environmental stress. Instruction connects physiological limits directly to operational planning decisions.

Applied drills and structured field scenarios reinforce practical performance planning and recovery strategies.



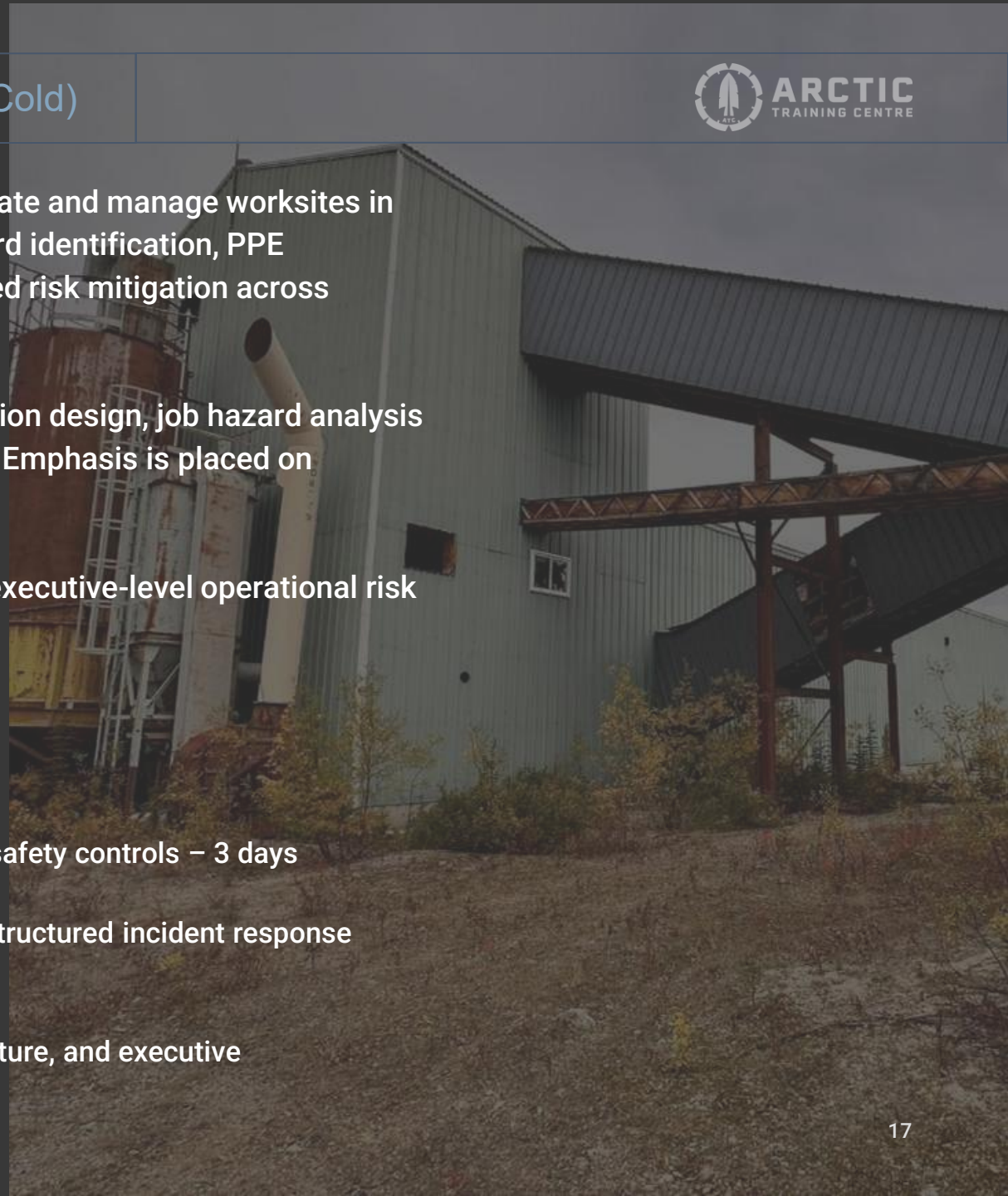
Levels offered:

Beginner – Layering systems, sweat management, work/rest cycles, and exposure risk control – 3 days

Intermediate – Sustained output planning, team pacing discipline, and fatigue mitigation under operational load – 5 days

Advanced – Multi-hour performance execution integrating workload distribution and cognitive resilience under stress – 5 days

Safe Work in Remote Conditions (Commercial & Industrial Cold)



This course prepares commercial and industrial teams to safely operate and manage worksites in Arctic and extreme cold conditions. Instruction focuses on cold hazard identification, PPE compatibility, equipment reliability in low temperatures, and structured risk mitigation across extended operations.

Participants develop cold-operations controls including warming station design, job hazard analysis adaptations, fatigue monitoring strategies, and regulatory alignment. Emphasis is placed on preventing cascading failures caused by environmental stressors.

Training culminates in a documented cold readiness evaluation and executive-level operational risk brief.

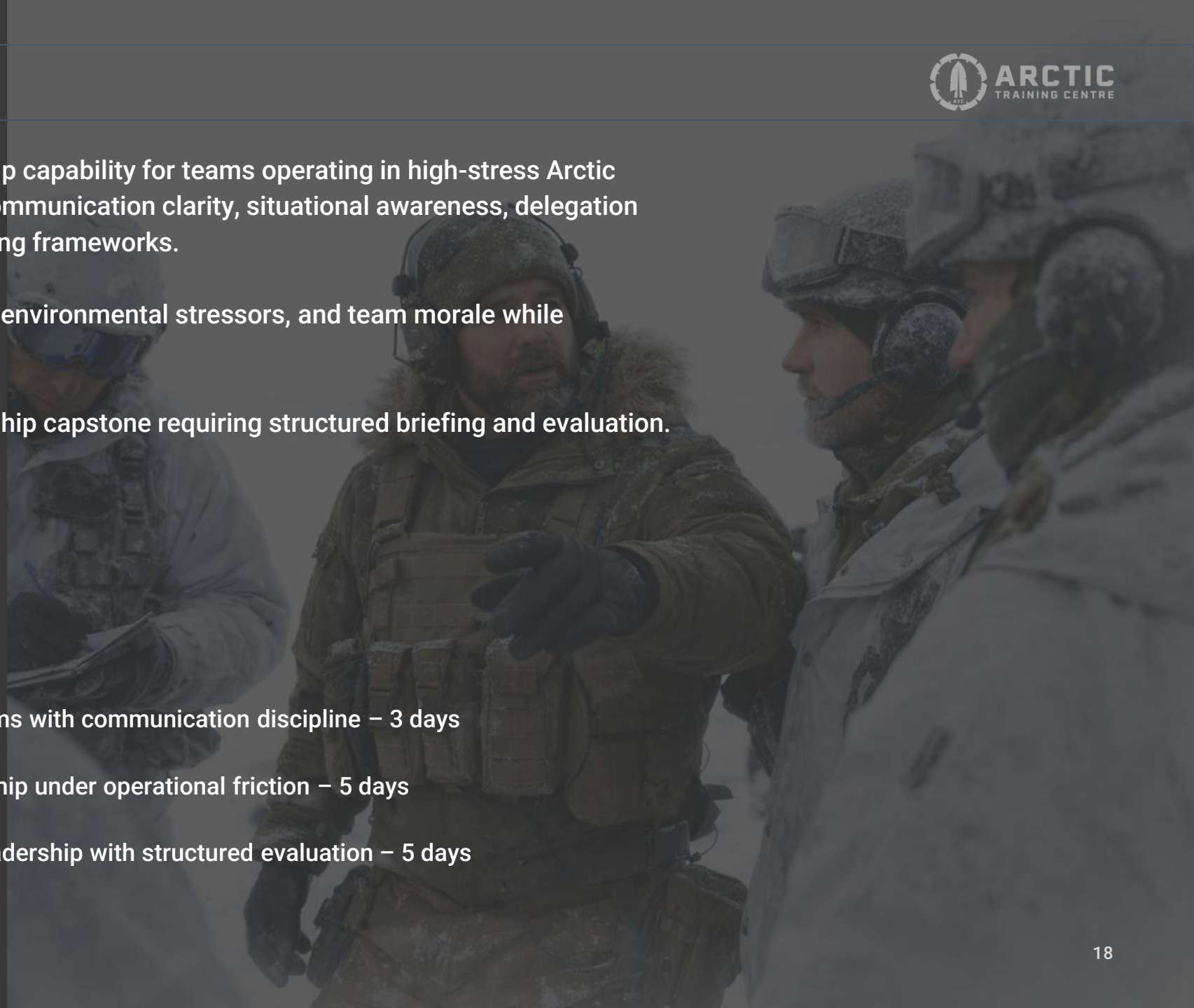
Levels offered:

Beginner – Cold hazard identification, PPE integration, and shift-level safety controls – 3 days

Intermediate – SOP development, equipment reliability planning, and structured incident response exercises – 5 days

Advanced – Full cold-operations program design with KPIs, audit structure, and executive reporting framework – 5 days

Leadership



This course develops practical leadership capability for teams operating in high-stress Arctic environments. Instruction focuses on communication clarity, situational awareness, delegation discipline, and structured decision-making frameworks.

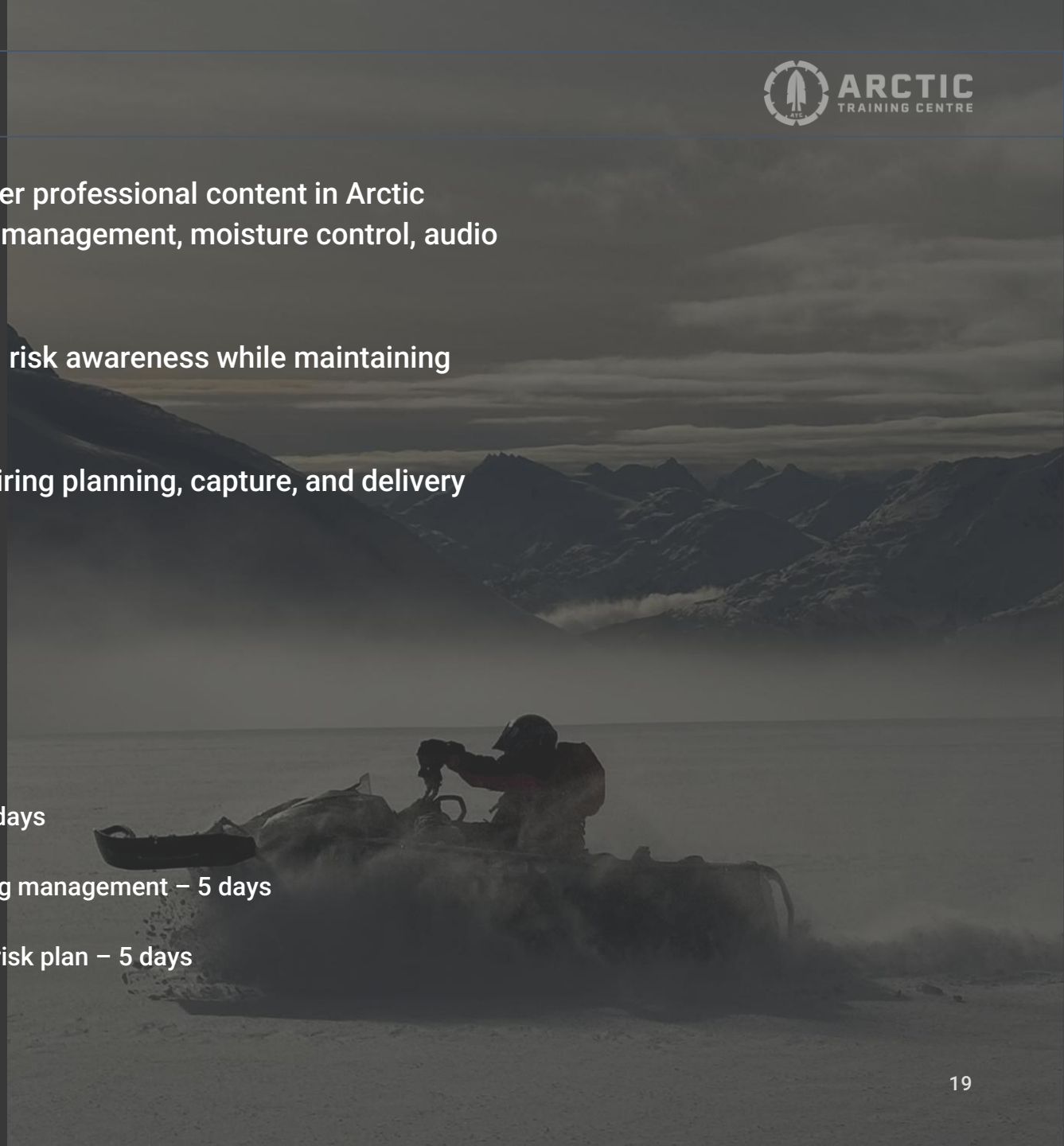
Participants manage fatigue, ambiguity, environmental stressors, and team morale while maintaining safety standards.

Applied exercises culminate in a leadership capstone requiring structured briefing and evaluation.

Levels offered:

- Beginner – Leading self and small teams with communication discipline – 3 days
- Intermediate – Delegation and leadership under operational friction – 5 days
- Advanced – Multi-team operational leadership with structured evaluation – 5 days

Marketing, Film, and Media



This course prepares media teams to safely capture and deliver professional content in Arctic environments. Instruction emphasizes gear reliability, battery management, moisture control, audio integrity, and field workflow discipline.

Participants learn structured shot planning and environmental risk awareness while maintaining operational safety.

Field exercises culminate in a mission-based production requiring planning, capture, and delivery package.

Levels offered:

- Beginner – Field gear fundamentals and safe capture practices – 3 days
- Intermediate – Multi-camera coordination and environmental lighting management – 5 days
- Advanced – Full production leadership with structured delivery and risk plan – 5 days

Telco and Networks

This course develops field-deployable communications and network resilience capability for Arctic operations. Instruction emphasizes RF fundamentals, satellite integration, power planning in cold, antenna discipline, and environmental hardening.

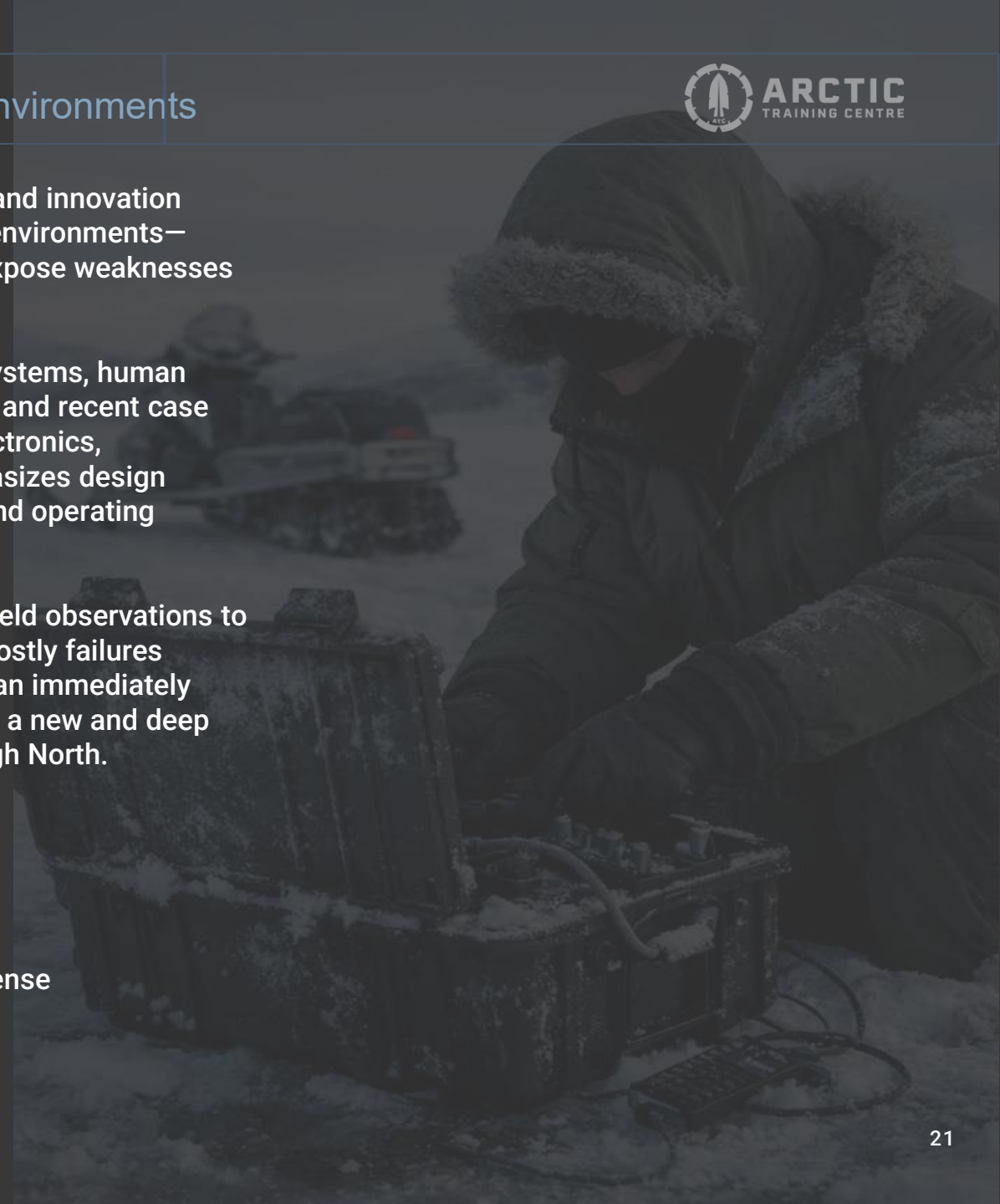
Participants design redundancy and respond to degradation scenarios under environmental stress.

Field scenarios culminate in a continuity exercise requiring performance reporting.

Levels offered:

- Beginner – Field communications setup and structured link verification – 3 days
- Intermediate – Redundancy design and degradation response execution – 5 days
- Advanced – Operational continuity leadership and validation metrics tracking – 5 days

Engineering for the Arctic: Designing for Failure-Intolerant Environments



This course trains engineers, product managers, designers, technical leaders, and innovation teams to design, test, and deploy products intended for Arctic and Sub-Arctic environments—where cold, wind, isolation, logistics constraints, and environmental hazards expose weaknesses in conventional design assumptions.

Participants learn how Arctic conditions stress materials, electronics, power systems, human interfaces, software, and operational concepts. The course draws on historical and recent case studies of both failed and successful Arctic products across mobility, PPE, electronics, infrastructure, energy systems, drones, and field equipment. Instruction emphasizes design trade-offs, lifecycle thinking, and the difference between surviving the Arctic and operating effectively within it.

Training combines classroom instruction, case-study analysis, and hands-on field observations to help teams recognize Arctic-specific “gotchas” early in development—before costly failures occur. Graduates leave with practical frameworks and design heuristics they can immediately apply to current or future products. In addition, participants will walk away with a new and deep appreciation for the landscape and environmental challenges present in the high North.

Course Length: 3 days

Format: Classroom + applied exercises + field observation

Audience: Engineering teams, R&D leaders, product managers, innovators, defense & dual-use companies, startups, NGOs, government programs

Certificate: ATC “Arctic Engineering & Product Design” Certificate